REMARKS

Claims 1 – 4, 7 – 17 and 20 were pending in the application. Claim 1 has been amended. Support for the amendment can be found in the specification, for example on page 24, lines 1-4. No new matter has been added.

Rejection of claims under 35 U.S.C. §112, first paragraph

New matter

The Office Action has rejected claims 1-4, 7-17, 22, and 23 are rejected for allegedly containing new matter. Applicant respectfully disagrees and points to the specification on page 3, lines 32-34 which clearly convey that the inventor was in possession of the invention as claimed at the time of filing of the application. Withdrawal of the rejection is respectfully requested.

Scope of enablement

The Office Action has rejected claims 1-4, 7-17, and 20 for allegedly not being enabled for the prevention of hematoma or blood clot. Without agreeing with the rejection, Applicant has deleted the word prevention in the claims. Withdrawal of the rejection is respectfully requested.

Rejection of claims under 35 U.S.C. §102

Whitelaw et al

The Office Action has rejected claims 1-4 and 23 for allegedly being anticipated by Whitelaw et al., 1996.

Applicant respectfully disagrees.

To anticipate a claim, each and every element of the claim must be found in a single reference. This is discussed in the Manual of Patent Examining Procedure § 2131:

> A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d

1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the . . . claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an ipsissimis verbis test, *i.e.*, identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

The Office Action asserts that the cited reference teaches the treatment of posthaemorrhagic hydrocephalus in infants by administering tPA as claimed. Applicant has amended claim 1 to recite that the subject can be assessed using the Glascow Coma Scale (GCS). The Glascow Coma Scale includes assessment of verbal ability and motor control. Applicant provides a copy of Teasdale and Jennett, 1974, Assessment of Coma and Impaired Conciousness, *Lancet* 204:81-84 which sets forth the GCS (cited as reference 13 in Usui as providing the GCS). To use the GCS, the subject must have been verbal prior to the hematoma and have had motor control prior to the hematoma. That is, the subject cannot be an infant. Moreover, Whitelaw teaches doses of tPA for adult therapy are 2 mg to 15 mg of tPA (bottom of column 1, page F21).

As the cited art does not teach all of the elements of the instantly claimed invention. Therefore, the instantly claimed invention cannot be anticipated by the cited art. Withdrawal of the rejection is respectfully requested.

Usui et al.

Claims 1-4, 7, 12, and 23 are rejected for allegedly being anticipated by Usui et al. (Neurosurgery, 1994). The Office Action states that "Usui et al. teaches a method for treatment of subarachnoid hemorrhage." Claim 2 is drawn to a method of treatment of intraventricular hemorrhage. Claim 3 is drawn to a method of treatment of intracerebral hemorrhage. The subarachnoid space is outside of the brain, adjacent to the pia matter. The intraventricular space and the intracerebral space are both within the brain. Therefore, the Office Action admits that the cited reference does not teach the claimed matter. Moreover, Usui specifically excludes subjects "with intracerebral and/ or intraventricular hemorrhage or subdural hematoma as the main lesion (second paragraph of "Patients and Methods" section). Therefore, Usui would not

consider those with subarachnoid hemorrhage to be equivalent to those with intracerebral and/ or intraventricular hemorrhage or subdural hematoma.

As the cited reference does not teach each and every element of the claimed invention, the rejection must be withdrawn.

Rejection of Claims Under 35 USC 103(a)

Whitelaw

The Office Action has rejected claim 7 as being unpatentable over Whitelaw et al. as applied to claims 1 – 4 and 23 above.

Applicant respectfully disagrees.

Claim 1 has been amended to recite wherein the subject can be assessed using the Glascow Coma Scale (GCS). Whitelaw is directed to treatment of infants who cannot be assessed using GCS as they are non-verbal and do not possess sufficient motor skills.

Applicant submits that one of skill in the art would not look to the teachings of a reference related to the treatment of adult hematoma. Or, if one were to consider the teachings of Whitelaw for treatment of those with verbal and motor skills, one would have used higher doses of 2mg to 15 mg tPA as taught by Whitelaw (page F21, end of column 1).

Applicant points to a later reference of Whitelaw (Whitelaw et al., Randomized clinical trial of prevention of hydroencephalus after intraventricular hemorrhage in preterm infants: Brain-washing versus tapping fluid. Pediatrics 119:e1071-e1078, 2007). The reference states, "Clearly, IVH in adults is very different from IVH in preterm infants with respect to etiology and also likelihood of raised ICP" (paragraph bridging columns on page 1072). The reasons for the difference are further discussed in the second column on page 1077 which states:

> It must be remembered that, unlike the use of rTPA after clipping an aneurysm with the subarachnoid hemorrhage the original cite of intraventricular bleeding in the infants in the DRIFT trial had not been repaired surgically.

Although the Whitelaw 2007 reference was published after the instantly filed application, one of skill in the art would have understood the differences in the etiology and treatment of hematoma in children and adults at the time of filing of the instant application, and the differences in treating a post surgical as compared to a spontaneous hemorrhage.. Further, the later Whitelaw reference notes the failure of all prior studies to provide the desired outcome

(including the reference cited in the instant rejection which is reference 13 in the later paper). Specifically, the abstract of the later Whitelaw reference states:

> Hydrocephalus is a serious complication of intraventricular hemorrhage in preterm infants, with adverse consequences from permanent ventriculoperitoneal shunt dependence. The development of hydrocephalus takes several weeks, but no clinical intervention has been shown to reduce shunt surgery in such infants.
>
> RESULTS…. Twelve (35%) of 34 infants who received drainage, irrigation, and fibrinolytic therapy had secondary intraventricular hemorrhage compared with 3 (8%) of 36 in the standard group. Secondary intraventricular hemorrhage was associated with an increased risk for subsequent shunt surgery and more blood transfusions. (emphasis added)

Therefore, by the admission of Whitelaw, it must be understood that the earlier methods of intervention were considered to have failed. As the prior methods failed, one would not consider the teachings of the methods to provide useful information. Accordingly, Applicants respectfully request reconsideration and withdrawal of the foregoing rejection.

Usui

The Office Action has rejected claims 8-11, 13-15 and 22 for allegedly being unpatentable under 35 U.S.C. §103 in view of Usui as applied to claims 1-4, 7, 12, and 23 as above. The Office Action states that Usui is only lacking in teachings of dosing intervals and monitoring with CT scans, and that it would have been obvious to modify Usui to provide these aspects of the instantly claimed invention.

Applicant respectfully disagrees.

As noted above, Usui is lacking in teaching treatment of intracerebral and/ or intraventricular hemorrhage or subdural hematoma, and specifically excludes subjects with those conditions from his study related to subarachnoid hemorrhage. Therefore, one of skill in the art would understand, based on the teachings of Usui, that with intracerebral and/ or intraventricular hemorrhage and subdural hematoma are distinct from subarachnoid hemorrhage. It cannot be obvious to modify Usui for use in methods of treatment of intracerebral and/ or intraventricular hemorrhage or subdural hematoma when those conditions are explicitly excluded from the study of Usui.

Usui and Mayfrank

The Office Action has rejected claims 16 and 17 for allegedly being unpatentable under 35 U.S.C. §103 over Usui in view of Mayfrank et al. The Office Action asserts that it would have been obvious to modify Usui based on the teachings of Mayfrank to cease treatment when the clot size was 80% of its original size.

Applicant respectfully disagrees.

As noted above, Usui is related to subarachnoid hemorrhage and specifically excludes subjects with intracerebral and/ or intraventricular hemorrhage and subdural hematoma from his study. Therefore, one of skill in the art would not be motivated to combine the teachings of Usui with Mayfrank which teaches methods related to intraventricular hemorrhage. Further, Applicant submits that Mayfrank cannot overcome the limitations of the teachings of Usui noted above.

In view of the above amendment and remarks, applicant believes the pending application is in condition for allowance.

Fees and Request for Extension of Time for Reply

Applicant hereby requests an extension of three months in time for reply. The Commissioner is hereby authorized to charge Deposit Account No. 04-1105 referencing Docket No. 58719(71699) fees for an extension of three months in time for reply, small entity. It is believe that there are no further fees due with this response. However, if a fee is due with this or any other paper submitted by this firm in relation to this application, the Commissioner is hereby authorized to charge the Deposit Account above. Refund of any overpayments is respectfully requested.

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Respectfully submitted,

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